

PERMIT APPLICATION: NRS #03-224

APPLICANT: Herbert Mc Cartney
506 East 11th Street
Rome, GA 30161
(706) 235-9972

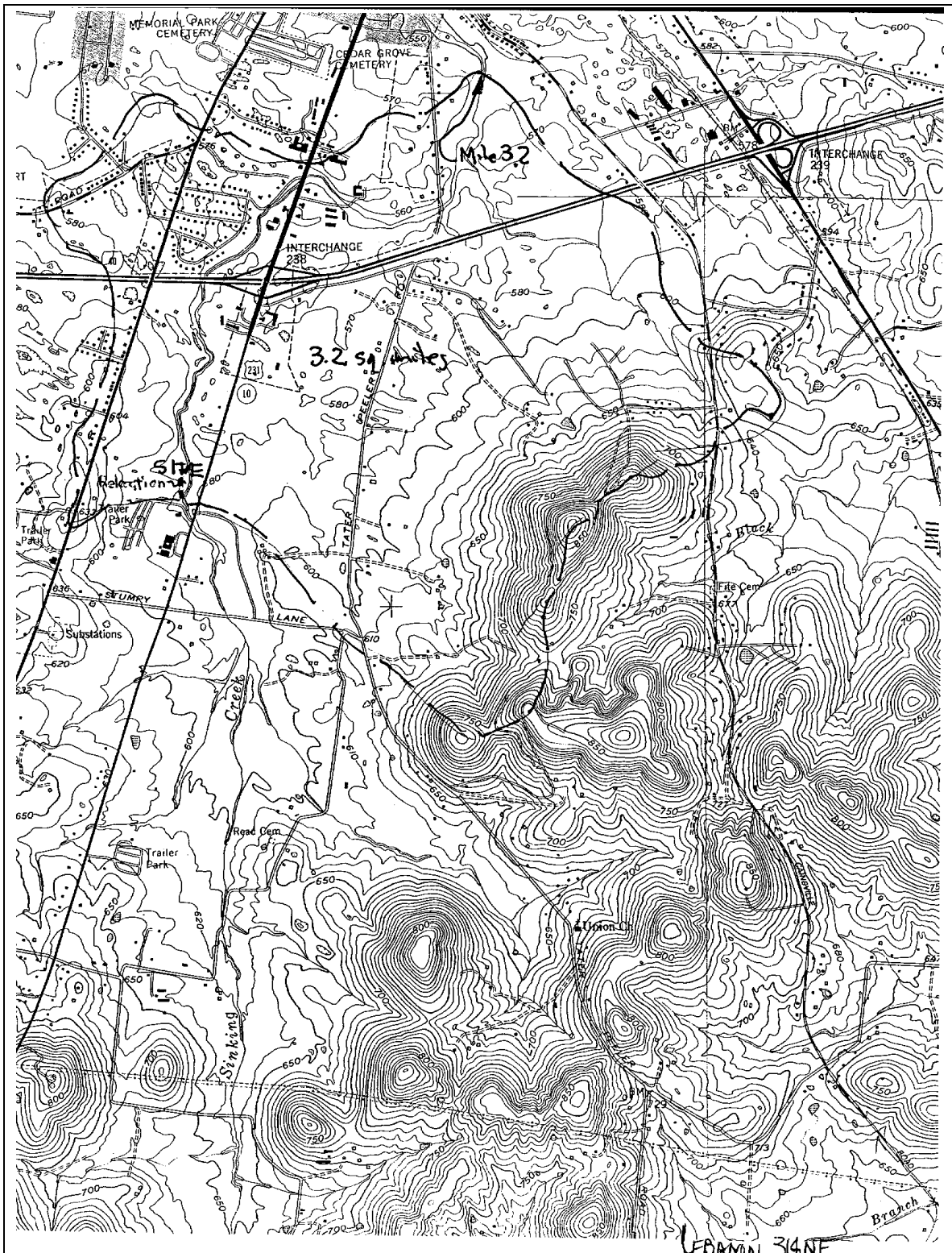
LOCATION: Sinking Creek; Intersection of South Hartman Drive and Highway
231 South; Lebanon, Wilson County

WATERSHED DESCRIPTION: The subject creek is an intermittent system. A well developed canopy covers a well defined channel with near vertical slopes and cobble, large rock scattered over a bedrock substrate. Channel is fairly straight through this area as it is controlled by up- and downstream crossings. Upstream watershed remains undeveloped while downstream is.

PROJECT DESCRIPTION: The applicant proposes to relocate 700 linear feet of Sinking Creek to facilitate development of the subject property for retail outlets fronting Hwy 231. The relocation shall be conducted according to the mitigation plan included in this Notice. The relocation will “mirror image” the existing channel. No blasting will occur and work will be conducted in the dry. A riparian zone will be re-established along the new channel through a combination of tree planting, vegetation mat removal and transplantation and the protection of a 20-foot wide “tree protection area”. The permittee will monitor the relocation channel guaranteeing successful establishment of flow in a defined bed and bank and 75% survival of trees. Annual reports will be submitted to this office.

PERMIT COORDINATOR: Mike Lee

USGS TOPOGRAPHICAL QUADRANGLE: LEBANON 314 NE



PAGE 2.
ARAP #03-224
HERBERT McCARTNEY

PROPOSED MITIGATION PLAN FOR McCARTNEY CREEK RELOCATION

A. General Narrative

1. Creek sinuosity will be provided by using a mirror image for the relocated creek.
2. Proposed channel sections will as closely as possible approximate existing channels sections including bottom pools.
3. Channel shading will be provided by protecting existing trees within a 20' natural tree protection zone to be maintained on the east side of the proposed channel. The west side of the proposed channel will have trees planted.
4. Vegetative mats will be used to transplant vegetation from the edge of the old channel to the new channel.
5. The owner will hire a competent professional to manage this project from beginning to end and to provide yearly reports to the state on the status of the mitigation.
6. The project has two (2) sections of storm pipe with headwalls and area drains discharging to the relocated stream channel. Any future development of the property between Hwy 231 South and Sinking Creek shall use these two (2) locations for storm water discharges. No new discharge locations will be permitted.

B. Construction Procedures

1. A preconstruction meeting will be held with the contractor prior to any work beginning. Contractor shall contact the Environmental Assistance Center and determine if a State of Tennessee General Permit – Notice of Intent is required for the relocation. If the NOI is required contractor shall coordinate approval with appropriate State official. The area of the tree protection zone will be flagged off so the contractor cannot operate equipment in this area.
2. Work will proceed from downstream up. A rock check dam will be placed at the downstream end of the existing channel when the relocation of the vegetative mats are taking place so that any siltation will not wash downstream.
3. No blasting will be done for the bottom of the relocated channel bottom. A rock cutter will be used to cut rock within this bottom area as necessary. The upper area on the channel and the floodplain shelf may be blasted with care taken to not fracture rock at the bottom of the channel.
4. Channel construction will be done during the dry part of the summer and the new channel will be completed including mitigation prior to abandoning the existing channel. Vegetation mitigation will be done in the fall after leaves have dropped to provide best survival chances for the vegetative mat. Contractor shall provide adequate topsoil in floodplain shelf where vegetation is placed to help ensure survival of vegetation.
5. When the channel is vegetated and ready for the stream to be turned into the relocated channel the contractor shall cut away the existing stream bank to transition flow to the relocated stream channel. He will provide a compacted clay plug a minimum of 50 feet long across the entire upstream side of the existing

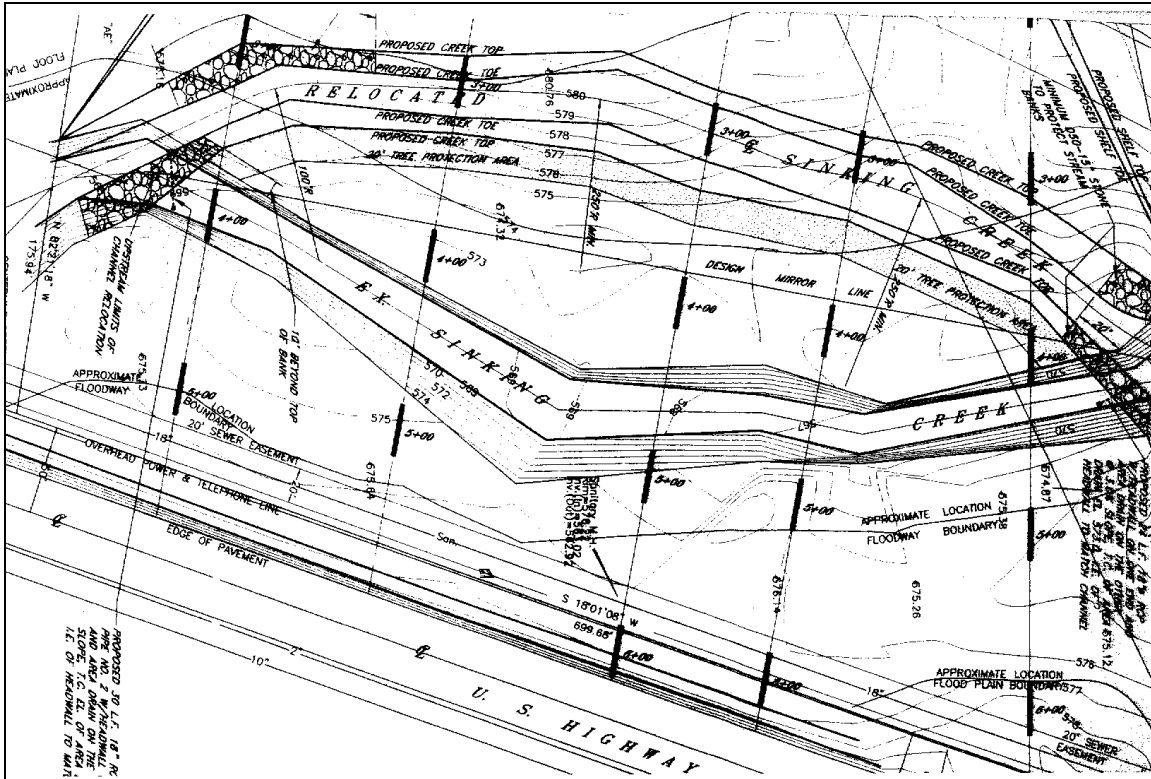
channel to ensure that flow will follow the relocated stream channel and not cut into the existing channel area.

6. Fill placed in the existing channel shall be properly compacted to support future loading foundations in this location. Contractor should coordinate with owner on testing of material.

C. Vegetative Mitigation

1. Trees will be provided with seedlings planted over the entire area of the flood plain shelf and where possible on the relocated creek bank. Seedlings will be a mixture of two (2) or three (3) types from the following list. (Sycamore, red maple, pin oak, sweet gum, green ash, or river birch depending on availability.) A total of five hundred (500) to seven hundred (700) seedlings or 2 to 3 bundles of 250 plants will be used to cover the 1.6 acres in the floodplain shelf and west creek bank area. Seedlings shall be planted in locations where there is natural soil or areas where topsoil has been placed in rocky shelf locations where the soil is held by cracks in the rock or natural features. Trees do not need to be evenly placed throughout the floodplain but rather placed in locations where they have the best chance of survival.
2. Vegetative mats are loader bucket sized areas of vegetation that are to be transplanted from the existing creek bank and overflow areas to the relocated channel. The Corp of Engineers representative, Kathleen Kuna, will assist by flagging the vegetative mat locations so the contractor will know what areas to scoop up with the loader and drop down along the relocated creek bank and scattered locations within the floodplain shelf area. There should be 35 to 40 vegetative mats used at approximately a 20-foot irregular spacing. The mat should be placed in locations to help insure their survival where there is existing soil or pockets of soil that are stable. The contractor must cover the edges of the vegetative mats after they are transplanted with soil or place them in a prepared depression by scooping out a hole prior to moving the mat.
3. Existing trees and vegetation within the twenty (20) foot wide "tree protection area" shall be protected by contractor and not disturbed.

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PAGE 5.
 ARAP#03-224
 HERBERT McCARTNEY